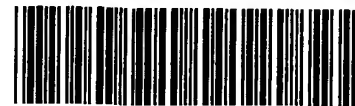# RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/764,957_

Source: _1FWO_

Date Processed by STIC: _10/18/04_

ENTERED

IFWO

RAW SEQUENCE LISTING   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:31

Input Set : A:\02-742-O_400.144 SeqList.txt
Output Set: N:\CRF4\10182004\J764957.raw

```
 3 <110> APPLICANT: Sirna Therapeutics, Inc.
 4        McSwiggen, James
 5        Pavco, Pamela
 6        Beigelman, Leo
 8 <120> TITLE OF INVENTION: RNA Interference Mediated Inhibition of Vascular Endothelial
 9        Growth Factor and Vascular Endothelial Growth Factor Receptor
10        Gene Expression Using Short Interfering Nucleic Acid (siNA)
12 <130> FILE REFERENCE: 400/144 (MBHB02-742-O)
14 <140> CURRENT APPLICATION NUMBER: US 10/764,957
15 <141> CURRENT FILING DATE: 2004-01-26
17 <150> PRIOR APPLICATION NUMBER: US 10/670,011
18 <151> PRIOR FILING DATE: 2003-09-23
20 <150> PRIOR APPLICATION NUMBER: US 10/665,255
21 <151> PRIOR FILING DATE: 2003-09-16
23 <150> PRIOR APPLICATION NUMBER: PCT/US03/05022
24 <151> PRIOR FILING DATE: 2003-02-20
26 <150> PRIOR APPLICATION NUMBER: US60/358,580
27 <151> PRIOR FILING DATE: 2002-02-20
29 <150> PRIOR APPLICATION NUMBER: US60/363,124
30 <151> PRIOR FILING DATE: 2002-03-11
32 <150> PRIOR APPLICATION NUMBER: US60/386,782
33 <151> PRIOR FILING DATE: 2002-06-06
35 <150> PRIOR APPLICATION NUMBER: US60/393,796
36 <151> PRIOR FILING DATE: 2002-07-03
38 <150> PRIOR APPLICATION NUMBER: US60/399,348
39 <151> PRIOR FILING DATE: 2002-07-29
41 <150> PRIOR APPLICATION NUMBER: US60/406,784
42 <151> PRIOR FILING DATE: 2002-08-29
44 <150> PRIOR APPLICATION NUMBER: US60/408,378
45 <151> PRIOR FILING DATE: 2002-09-05
47 <150> PRIOR APPLICATION NUMBER: US60/409,293
48 <151> PRIOR FILING DATE: 2002-09-09
50 <150> PRIOR APPLICATION NUMBER: US60/440,129
51 <151> PRIOR FILING DATE: 2003-01-15
53 <150> PRIOR APPLICATION NUMBER: US10/306,747
54 <151> PRIOR FILING DATE: 2002-11-27
56 <150> PRIOR APPLICATION NUMBER: US60/344,461
57 <151> PRIOR FILING DATE: 2001-11-30
59 <150> PRIOR APPLICATION NUMBER: US10/287,949
60 <151> PRIOR FILING DATE: 2002-11-04
62 <150> PRIOR APPLICATION NUMBER: PCT/US02/17674
63 <151> PRIOR FILING DATE: 2002-05-29
65 <160> NUMBER OF SEQ ID NOS: 473
```

RAW SEQUENCE LISTING   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:31

Input Set : A:\02-742-O_400.144 SeqList.txt
Output Set: N:\CRF4\10182004\J764957.raw

```
 67 <170> SOFTWARE: PatentIn version 3.3
 69 <210> SEQ ID NO: 1
 70 <211> LENGTH: 19
 71 <212> TYPE: RNA
 72 <213> ORGANISM: Artificial Sequence
 74 <220> FEATURE:
 75 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
 77 <400> SEQUENCE: 1
 78 gcggaggcuu ggggcagcc                                    19
 81 <210> SEQ ID NO: 2
 82 <211> LENGTH: 19
 83 <212> TYPE: RNA
 84 <213> ORGANISM: Artificial Sequence
 86 <220> FEATURE:
 87 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
 89 <400> SEQUENCE: 2
 90 cggguagcuc ggaggucgu                                    19
 93 <210> SEQ ID NO: 3
 94 <211> LENGTH: 19
 95 <212> TYPE: RNA
 96 <213> ORGANISM: Artificial Sequence
 98 <220> FEATURE:
 99 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
101 <400> SEQUENCE: 3
102 uggcgcuggg ggcuagcac                                    19
105 <210> SEQ ID NO: 4
106 <211> LENGTH: 19
107 <212> TYPE: RNA
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
113 <400> SEQUENCE: 4
114 ccagcgcucu gucgggagg                                    19
117 <210> SEQ ID NO: 5
118 <211> LENGTH: 19
119 <212> TYPE: RNA
120 <213> ORGANISM: Artificial Sequence
122 <220> FEATURE:
123 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
125 <400> SEQUENCE: 5
126 gcgcagcggu uagguggac                                    19
129 <210> SEQ ID NO: 6
130 <211> LENGTH: 19
131 <212> TYPE: RNA
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
```

137 <400> SEQUENCE: 6
138 ccggucagcg gacucaccg   19

RAW SEQUENCE LISTING   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:31

        Input Set : A:\02-742-O_400.144 SeqList.txt
        Output Set: N:\CRF4\10182004\J764957.raw

    141 <210> SEQ ID NO: 7
    142 <211> LENGTH: 19
    143 <212> TYPE: RNA
    144 <213> ORGANISM: Artificial Sequence
    146 <220> FEATURE:
    147 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    149 <400> SEQUENCE: 7
    150 ggccagggcg cucggugcu   19
    153 <210> SEQ ID NO: 8
    154 <211> LENGTH: 19
    155 <212> TYPE: RNA
    156 <213> ORGANISM: Artificial Sequence
    158 <220> FEATURE:
    159 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    161 <400> SEQUENCE: 8
    162 uggaauuuga uauucauug   19
    165 <210> SEQ ID NO: 9
    166 <211> LENGTH: 19
    167 <212> TYPE: RNA
    168 <213> ORGANISM: Artificial Sequence
    170 <220> FEATURE:
    171 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    173 <400> SEQUENCE: 9
    174 gauccggguu uuaucccuc   19
    177 <210> SEQ ID NO: 10
    178 <211> LENGTH: 19
    179 <212> TYPE: RNA
    180 <213> ORGANISM: Artificial Sequence
    182 <220> FEATURE:
    183 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    185 <400> SEQUENCE: 10
    186 cuucuuuuuu cuuaaacau   19
    189 <210> SEQ ID NO: 11
    190 <211> LENGTH: 19
    191 <212> TYPE: RNA
    192 <213> ORGANISM: Artificial Sequence
    194 <220> FEATURE:
    195 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    197 <400> SEQUENCE: 11
    198 uuuuuuuuua aaacuguau   19
    201 <210> SEQ ID NO: 12
    202 <211> LENGTH: 19
    203 <212> TYPE: RNA
    204 <213> ORGANISM: Artificial Sequence
    206 <220> FEATURE:
    207 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    209 <400> SEQUENCE: 12

210 uuguuucucg uuuuaauuu   19
213 <210> SEQ ID NO: 13

RAW SEQUENCE LISTING   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:31

Input Set : A:\02-742-O_400.144 SeqList.txt
Output Set: N:\CRF4\10182004\J764957.raw


```
214 <211> LENGTH: 19
215 <212> TYPE: RNA
216 <213> ORGANISM: Artificial Sequence
218 <220> FEATURE:
219 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
221 <400> SEQUENCE: 13
222 uauuuuugcu ugccauucc                                                  19
225 <210> SEQ ID NO: 14
226 <211> LENGTH: 19
227 <212> TYPE: RNA
228 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
233 <400> SEQUENCE: 14
234 cccacuugaa ucgggccga                                                  19
237 <210> SEQ ID NO: 15
238 <211> LENGTH: 19
239 <212> TYPE: RNA
240 <213> ORGANISM: Artificial Sequence
242 <220> FEATURE:
243 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
245 <400> SEQUENCE: 15
246 acggcuuggg gagauugcu                                                  19
249 <210> SEQ ID NO: 16
250 <211> LENGTH: 19
251 <212> TYPE: RNA
252 <213> ORGANISM: Artificial Sequence
254 <220> FEATURE:
255 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
257 <400> SEQUENCE: 16
258 ucuacuuccc caaaucacu                                                  19
261 <210> SEQ ID NO: 17
262 <211> LENGTH: 19
263 <212> TYPE: RNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
269 <400> SEQUENCE: 17
270 uguggauuuu ggaaaccag                                                  19
273 <210> SEQ ID NO: 18
274 <211> LENGTH: 19
275 <212> TYPE: RNA
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
279 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
281 <400> SEQUENCE: 18
282 gcagaaagag gaaagaggu                                                  19
```

285 <210> SEQ ID NO: 19
286 <211> LENGTH: 19

RAW SEQUENCE LISTING   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:31

Input Set : A:\02-742-O_400.144 SeqList.txt
Output Set: N:\CRF4\10182004\J764957.raw

    287 <212> TYPE: RNA
    288 <213> ORGANISM: Artificial Sequence
    290 <220> FEATURE:
    291 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    293 <400> SEQUENCE: 19
    294 uagcaagagc uccagagag   19
    297 <210> SEQ ID NO: 20
    298 <211> LENGTH: 19
    299 <212> TYPE: RNA
    300 <213> ORGANISM: Artificial Sequence
    302 <220> FEATURE:
    303 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    305 <400> SEQUENCE: 20
    306 gaagucgagg aagagagag   19
    309 <210> SEQ ID NO: 21
    310 <211> LENGTH: 19
    311 <212> TYPE: RNA
    312 <213> ORGANISM: Artificial Sequence
    314 <220> FEATURE:
    315 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    317 <400> SEQUENCE: 21
    318 gacgggguca gagagagcg   19
    321 <210> SEQ ID NO: 22
    322 <211> LENGTH: 19
    323 <212> TYPE: RNA
    324 <213> ORGANISM: Artificial Sequence
    326 <220> FEATURE:
    327 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    329 <400> SEQUENCE: 22
    330 gcgcgggcgu gcgagcagc   19
    333 <210> SEQ ID NO: 23
    334 <211> LENGTH: 19
    335 <212> TYPE: RNA
    336 <213> ORGANISM: Artificial Sequence
    338 <220> FEATURE:
    339 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    341 <400> SEQUENCE: 23
    342 cgaaagcgac aggggcaaa   19
    345 <210> SEQ ID NO: 24
    346 <211> LENGTH: 19
    347 <212> TYPE: RNA
    348 <213> ORGANISM: Artificial Sequence
    350 <220> FEATURE:
    351 <223> OTHER INFORMATION: Description of Artificial Sequence: Target Sequence/siNA
sense region
    353 <400> SEQUENCE: 24
    354 agugagugac cugcuuuug   19
    357 <210> SEQ ID NO: 25

```
358 <211> LENGTH: 19
359 <212> TYPE: RNA
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:32

Input Set : A:\02-742-O_400.144 SeqList.txt
Output Set: N:\CRF4\10182004\J764957.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:233; N Pos.  20,21
Seq#:234; N Pos.  20,21
Seq#:235; N Pos.  20,21
Seq#:236; N Pos.  20,21
Seq#:237; N Pos.  20,21
Seq#:238; N Pos.  20,21
Seq#:239; N Pos.  20,21
Seq#:240; N Pos.  20,21
Seq#:241; N Pos.  20,21
Seq#:242; N Pos.  20,21
Seq#:243; N Pos.  20,21
Seq#:244; N Pos.  20,21
Seq#:245; N Pos.  20,21
Seq#:246; N Pos.  20,21
Seq#:247; N Pos.  20,21
Seq#:248; N Pos.  20,21
Seq#:249; N Pos.  20,21
Seq#:250; N Pos.  20,21
Seq#:251; N Pos.  20,21
Seq#:252; N Pos.  20,21
Seq#:253; N Pos.  20,21
Seq#:254; N Pos.  20,21
Seq#:255; N Pos.  20,21
Seq#:256; N Pos.  20,21
Seq#:257; N Pos.  20,21
Seq#:258; N Pos.  20,21
Seq#:259; N Pos.  20,21
Seq#:260; N Pos.  20,21
Seq#:261; N Pos.  20,21
Seq#:262; N Pos.  20,21
Seq#:263; N Pos.  20,21
Seq#:264; N Pos.  20,21
Seq#:265; N Pos.  20,21
Seq#:266; N Pos.  20,21
Seq#:267; N Pos.  20,21
Seq#:268; N Pos.  20,21
Seq#:269; N Pos.  20,21
Seq#:270; N Pos.  20,21
Seq#:271; N Pos.  20,21
Seq#:272; N Pos.  20,21
Seq#:273; N Pos.  20,21
Seq#:274; N Pos.  20,21
Seq#:275; N Pos.  20,21
Seq#:276; N Pos.  20,21
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:32

Input Set : A:\02-742-O_400.144 SeqList.txt
Output Set: N:\CRF4\10182004\J764957.raw

```
Seq#:277; N Pos. 20,21
Seq#:278; N Pos. 20,21
Seq#:279; N Pos. 20,21
Seq#:280; N Pos. 20,21
Seq#:281; N Pos. 20,21
Seq#:282; N Pos. 20,21
Seq#:283; N Pos. 20,21
```

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

```
Seq#:385; Line(s) 7925
Seq#:386; Line(s) 7937
Seq#:387; Line(s) 7949
Seq#:388; Line(s) 7961
Seq#:389; Line(s) 7973
Seq#:390; Line(s) 7985
Seq#:391; Line(s) 7997
Seq#:392; Line(s) 8009
Seq#:393; Line(s) 8021
Seq#:394; Line(s) 8033
Seq#:395; Line(s) 8045
Seq#:396; Line(s) 8057
Seq#:397; Line(s) 8069
Seq#:398; Line(s) 8081
Seq#:399; Line(s) 8093
Seq#:400; Line(s) 8105
Seq#:401; Line(s) 8117
Seq#:402; Line(s) 8129
Seq#:403; Line(s) 8141
Seq#:404; Line(s) 8153
Seq#:405; Line(s) 8165
Seq#:406; Line(s) 8177
Seq#:407; Line(s) 8189
Seq#:408; Line(s) 8201
Seq#:409; Line(s) 8213
Seq#:458; Line(s) 10292
Seq#:459; Line(s) 10320
Seq#:460; Line(s) 10353
Seq#:461; Line(s) 10385
Seq#:462; Line(s) 10417
Seq#:463; Line(s) 10450
Seq#:464; Line(s) 10484
```

VERIFICATION SUMMARY   DATE: 10/18/2004
PATENT APPLICATION: US/10/764,957   TIME: 13:57:32

Input Set : A:\02-742-O_400.144 SeqList.txt
Output Set: N:\CRF4\10182004\J764957.raw

```
L:2868 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:233 after pos.:0
L:2886 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:234 after pos.:0
L:2904 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:235 after pos.:0
L:2922 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:236 after pos.:0
L:2940 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:237 after pos.:0
L:2958 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:238 after pos.:0
L:2976 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:239 after pos.:0
L:2994 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:240 after pos.:0
L:3032 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:241 after pos.:0
L:3080 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:242 after pos.:0
L:3128 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:243 after pos.:0
L:3186 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:244 after pos.:0
L:3219 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:0
L:3262 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:246 after pos.:0
L:3310 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:247 after pos.:0
L:3363 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:248 after pos.:0
L:3411 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:249 after pos.:0
L:3479 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:250 after pos.:0
L:3552 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:251 after pos.:0
L:3640 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:252 after pos.:0
L:3683 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:253 after pos.:0
L:3746 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:254 after pos.:0
L:3814 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:255 after pos.:0
L:3892 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:256 after pos.:0
L:3935 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:257 after pos.:0
L:3998 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:258 after pos.:0
L:4066 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:259 after pos.:0
L:4149 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:260 after pos.:0
L:4192 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:261 after pos.:0
L:4255 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:262 after pos.:0
L:4323 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:263 after pos.:0
L:4411 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:264 after pos.:0
L:4439 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:265 after pos.:0
L:4467 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:266 after pos.:0
L:4495 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:267 after pos.:0
L:4523 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:268 after pos.:0
L:4546 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:269 after pos.:0
L:4569 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:270 after pos.:0
L:4592 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:271 after pos.:0
L:4615 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:272 after pos.:0
L:4633 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:273 after pos.:0
L:4651 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:274 after pos.:0
L:4669 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:275 after pos.:0
L:4687 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:276 after pos.:0
L:4705 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:277 after pos.:0
L:4723 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:278 after pos.:0
L:4741 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:279 after pos.:0
L:4759 M:341 W:  (46) "n" or "Xaa" used, for SEQ ID#:280 after pos.:0
```

VERIFICATION SUMMARY   DATE: 10/18/2004
PATENT APPLICATION: **US/10/764,957**   TIME: 13:57:32

Input Set : **A:\02-742-O_400.144 SeqList.txt**
Output Set: **N:\CRF4\10182004\J764957.raw**

L:4777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:281 after pos.:0
L:4795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:282 after pos.:0